[071] <u>CLAIMS</u>:

1. A composition comprising a triiodothyronine protected at a phenolic hydroxyl with a protecting group said protecting group selected from the group consisting of dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, trialkylsilyl, and benzyloxy carbonyl.

- 2. The composition claim 1, wherein the dialkylphosphinate is selected from a C_1 to C_{18} substituted alkyl.
- 3. The composition claim 1, wherein the dialkylphosphinate is selected from a C_1 to C_{18} unsubstituted alkyl.
- 4. The composition of claim 1, wherein the dialkylphosphinate is dimethylphosphinate
- 5. The composition of claim 1, wherein the dialkylphosphinate is diethylphosphinate.
- 6. The composition of claim 1, wherein the diarylphosphinate is a substituted phenyl.
- 7. The composition of claim 1, wherein the diarylphosphinate is an unsubstituted phenyl.
- 8. The composition claim 1, wherein the dialkylphosphate is selected from a C_1 to C_{18} substituted or unsubstituted alkyl.
- 9. The composition of claim 1, wherein the dialkylphosphate is dimethylphosphate
- 10. The composition of claim 1, wherein the dialkylphosphate is diethylphosphate.
- 11. The composition of claim 1, wherein the diarylphosphate is a substituted phenyl.
- 12. The composition of claim 1, wherein the diarylphosphate is an unsubstituted phenyl.
- 13. The composition of claim 1, further comprising a pharmaceutically acceptable excipient.

14. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 13.

15. The method of claim 14 wherein said condition is hypothyroidism or depression.

16. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising

the composition of claim 1.

17. A composition comprising a reverse triiodothyronine protected at a phenolic hydroxyl

with a protecting group, said protecting group selected from the group consisting of

dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate,

diarylphosphate, acetyl, and benzyloxy carbonyl.

18. The composition of claim 17, further comprising a pharmaceutically acceptable

excipient.

19. A method of treating a thyroid related condition comprising treating a patient in need

thereof with the composition of claim 18.

20. The method of claim 19 wherein said condition is hypothyroidism or depression.

21. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising

the composition of claim 17.

22. A composition comprising a 3,5 diiodothyronine protected at a phenolic hydroxyl with

a protecting group, said protecting group selected from dialkylphosphinate,

diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, and

benzyloxy carbonyl

23. The composition of claim 22 wherein the 3,5 diiodothyronine is selected from 3,5

diiodothyronine, 3',5' diiodothyronine, and 3,3' diiodothyronine.

-17-

24. The composition of claim 23, further comprising a pharmaceutically acceptable excipient.

- 25. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 24.
- 26. The method of claim 25 wherein said condition is hypothyroidism or depression.
- 27. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 22.
- 28. A composition comprising a 3-monoiodothyronine protected at a phenolic hydroxyl with a protecting group selected dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, and benzyloxy carbonyl.
- 29. The composition of claim 28, further comprising a pharmaceutically acceptable excipient.
- 30. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 29.
- 31. The method of claim 30 wherein said condition is hypothyroidism or depression.
- 32. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 28.
- 33. A composition comprising a thyroxine protected at the phenolic hydroxyl with a protecting group selected from diarylphosphinate, alkylarylphosphinate, diarylphosphate, acetyl, and benzyloxy carbonyl.
- 34. The composition of claim 33, further comprising a pharmaceutically acceptable excipient.

35. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 34.

- 36. The method of claim 35 wherein said condition is hypothyroidism or depression.
- 37. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 33.
- 38. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an ingestible tablet.
- 39. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an intravenous preparation.
- 40. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an oral dosage.